

December 15, 2008

AGENDA ITEM 8a

TO: MEMBERS OF THE INVESTMENT COMMITTEE

- I. SUBJECT:** Currency Overlay Managers Annual Review
- II. PROGRAM:** Currency Overlay
- III. RECOMMENDATION:** Renew annual contracts of CalPERS' currency overlay managers, Pareto Investment Management Limited (Pareto) and State Street Global Advisors (SSgA), for a period of one year. Wilshire Associates' opinion letter is shown in Attachment 3. Wilshire Associates' disclosure letter is shown in Attachment 4.

IV. ANALYSIS:

Recommendation Rationale

In light of the exceptional market conditions of the previous year, CalPERS' currency overlay program external managers have had acceptable results with Pareto's performance exceeding the fully hedged benchmark and SSgA's falling within the bounds of the hedged benchmark and unhedged currency returns. Therefore, Staff recommends renewal of their contracts for a period of one year.

Background

The primary policy objective of CalPERS' currency overlay program is to provide risk control, or a reduction in the volatility of the returns of CalPERS' international equity investments. Return is a secondary consideration. These dual goals have created ambiguity in assessing manager performance as will be discussed later in this agenda item.

Assets Under Management

As of September 30, 2008, Pareto overlaid approximately 10.5% or \$3.77 billion and SSgA overlaid 7.7% or \$2.8 billion of CalPERS' international equity assets as depicted in Table 1 and Graph 1 below. The currency overlay program as a whole is mandated to overlay 25 percent of all CalPERS' international equity exposure. As of September 30, 2008, the entire currency overlay was \$9.7 billion.

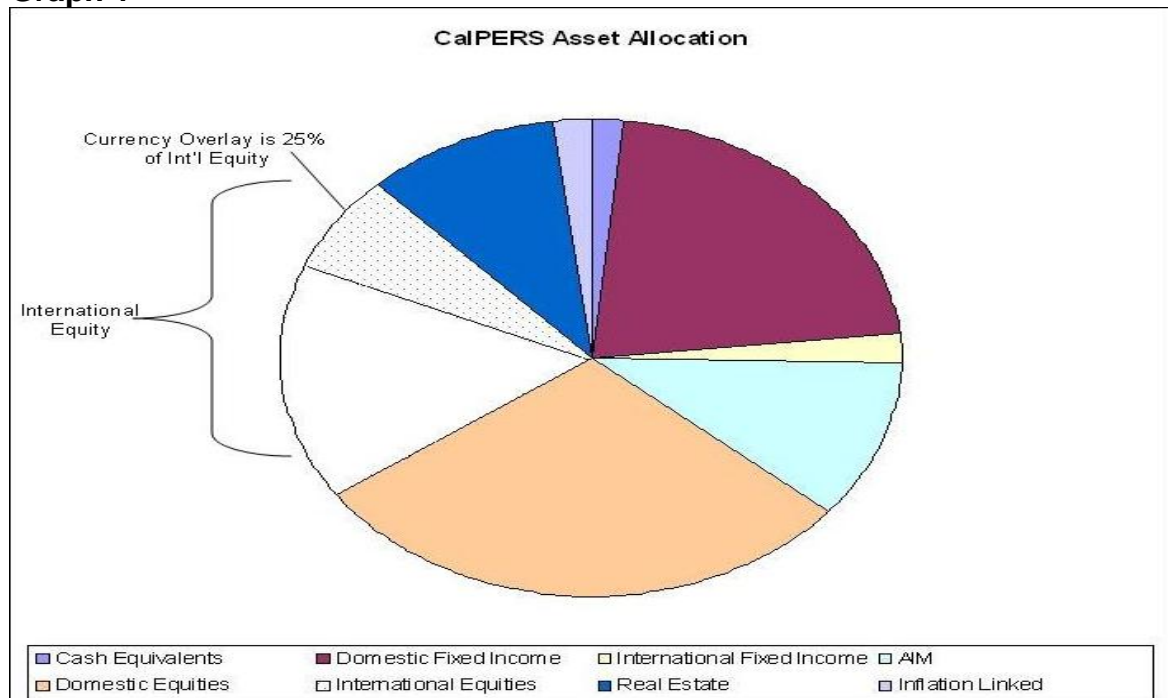
Table 1

Manager	Portfolio Value (in billions)	% of International Equity
Pareto Investment Management Ltd.	\$3.77 billion	10.5%
State Street Global Advisors	\$2.80 billion	7.7%

Source: CalPERS

Below, Graph 1 visually represents the approximate size of the entire currency overlay program as a proportion of International Equity. Note, that as of September 30, 2008, the managers being reviewed in this item represent 18.2% of the total 25% overlay. The balance consists of the internally managed passive and active currency overlay accounts. International Equity holdings represent approximately 20.8% of total plan assets or \$44.5 billion as of September 30, 2008.

Graph 1



Source: CalPERS

Risk and Return Expectations

As the primary goal of the program is risk reduction, the managers are compared to a fully hedged benchmark. The benchmark is asymmetrical as managers can never be more than fully hedged; therefore maximum risk reduction may be achieved only if managers do not take any positions away from the benchmark. As managers take positions away from the benchmark and reduce the hedge, they increase the risk of the overlay portfolio, while at the same time allowing for possible alpha generation.

There are 2 basic environments in the currency markets which present asymmetric opportunities for managers:

- 1) Foreign currencies weaken against the U.S. dollar. Managers can only hedge to 100%, thereby matching the benchmark. The current program structure prevents external managers from hedging more than 100% of their portfolio size. This restriction precludes managers from producing alpha in this environment. In depreciating foreign currency environments, the external managers seek to limit losses to no more than 3% below the fully hedged benchmark.
- 2) Foreign currencies strengthen against the U.S. dollar. Managers can reduce hedges and potentially generate alpha. In appreciating foreign currency markets, the external managers seek to capture approximately 60% of the currency gains.

In analyzing the currency overlay program, certain issues exist with respect to performance measurement. These issues include the dual set of goals (risk reduction vs. alpha generation), the performance of which depend upon the currency market environment as noted above. As a result, one can only determine the proper measurement metric (fully hedged benchmark vs. unhedged currency return) ex post. Additionally, currency overlay managers strive to generate alpha and reduce risk over an entire business cycle rather than an arbitrarily defined one year review period.

It is Staff's intention to adjust the external program's benchmark so it will be symmetrical, allowing for alpha generation in all market environments. The design is expected to mirror the current structure of the internal active currency overlay portfolio. This change would be brought before the Policy Subcommittee or the Investment Committee as appropriate, prior to implementation.

Market Environment

During the annual review period currency markets swung violently between the two environments noted above, leading to divergent performance amongst

managers employing different strategies. Early in the period, which also coincided with the initial stages of the credit crisis in the U.S., developed market currencies remained relatively calm. Existing trends that had been in place for several years, namely U.S. dollar weakness, continued unabated. As the credit crisis intensified and spread, the U.S. dollar reversed course in dramatic fashion as U.S. investors repatriated foreign currency denominated holdings and investors generally sought the safest investments available, namely U.S. Treasuries.

As the U.S. dollar began strengthening, market dislocations intensified due to the bankruptcy filing of Lehman Brothers. These dislocations manifest themselves as significantly wider bid/offer spreads and dysfunctional short term interest rate markets, from which the fully hedged benchmark is derived. The spike in short term interest rates in the U.S. translated into a severe dislocation in the fully hedged benchmark which in turn led to large manager underperformance in the month of September.

Performance

Table 2 shows the program's excess returns for various periods and its information ratio using average monthly return data for the latest 3 year period. Due to the asymmetrical benchmark, information ratio analysis is less informative compared to other programs that have symmetrical benchmarks.

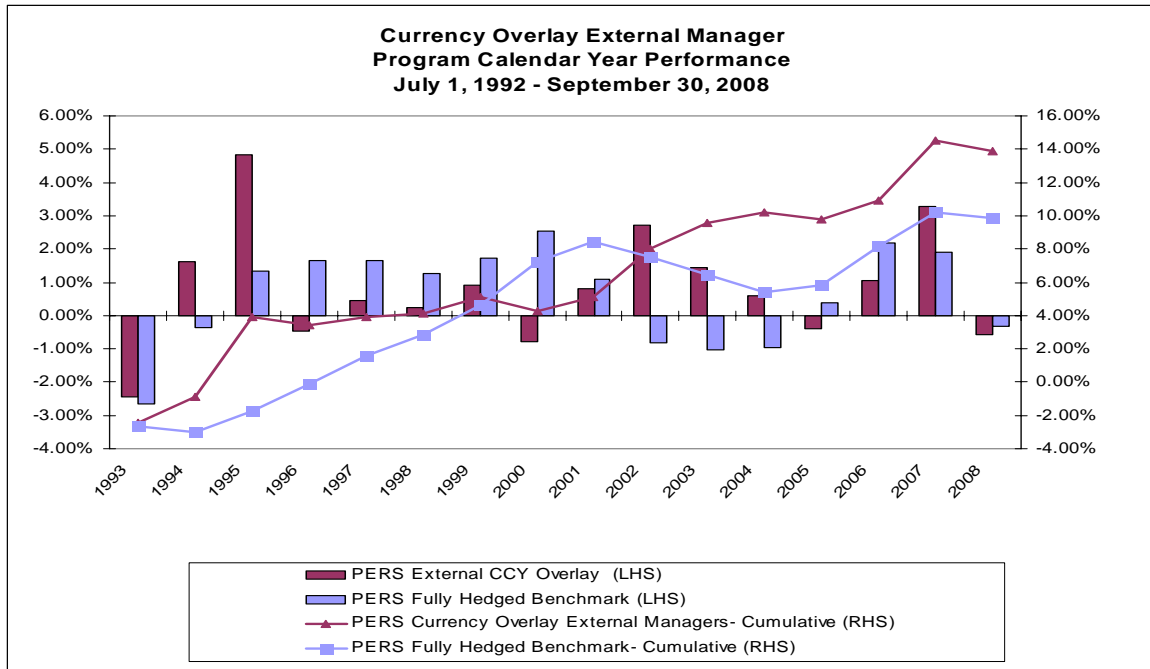
Table 2

Currency Program Overlay External Managers	1 Year	3 Years	5 Years	Annualized Since Inception	Inception Date	3 Year Info. Ratio
Total Program	-0.58%	1.24%	0.78%	0.84%	July 1992	-0.008
Benchmark	-0.31%	1.26%	0.63%	0.52%		
Excess Return	-0.27%	-0.02%	0.15%	0.32%		

Source: State Street Bank and CalPERS

The long term performance for the external manager portion of the Currency Overlay Program since inception is shown in Graph 2 on the following page.

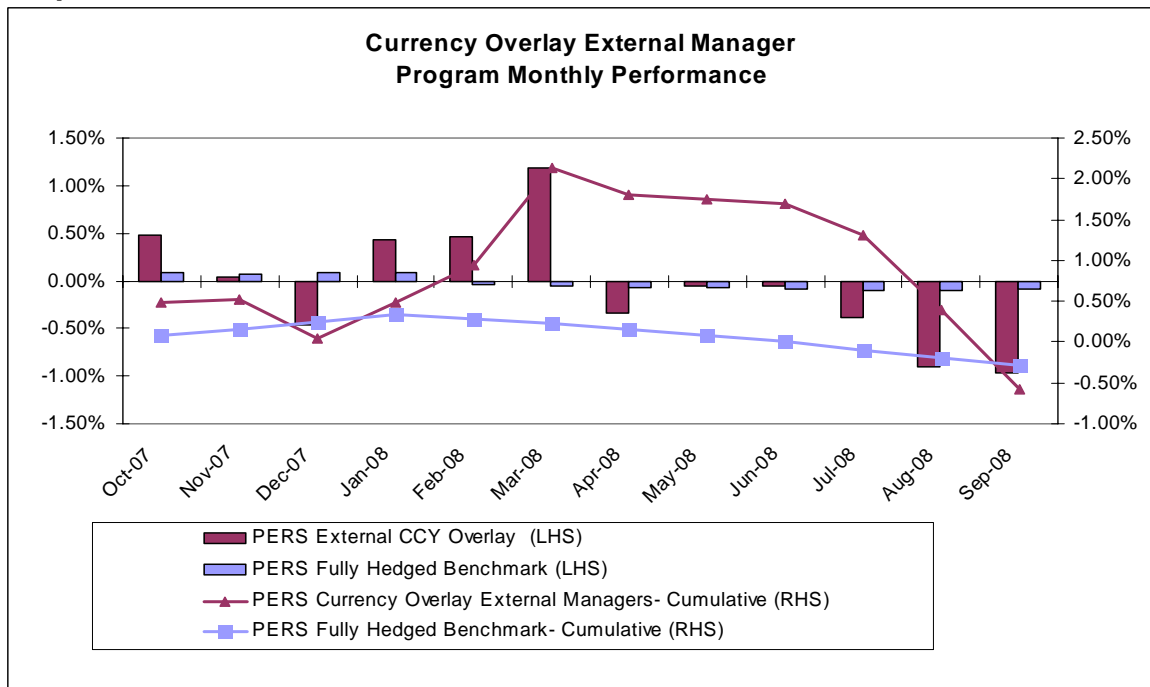
Graph 2



Source: State Street Bank and CalPERS

The performance for the external manager portion of the Currency Overlay Program over the one-year review period is shown in Graph 3 below.

Graph 3

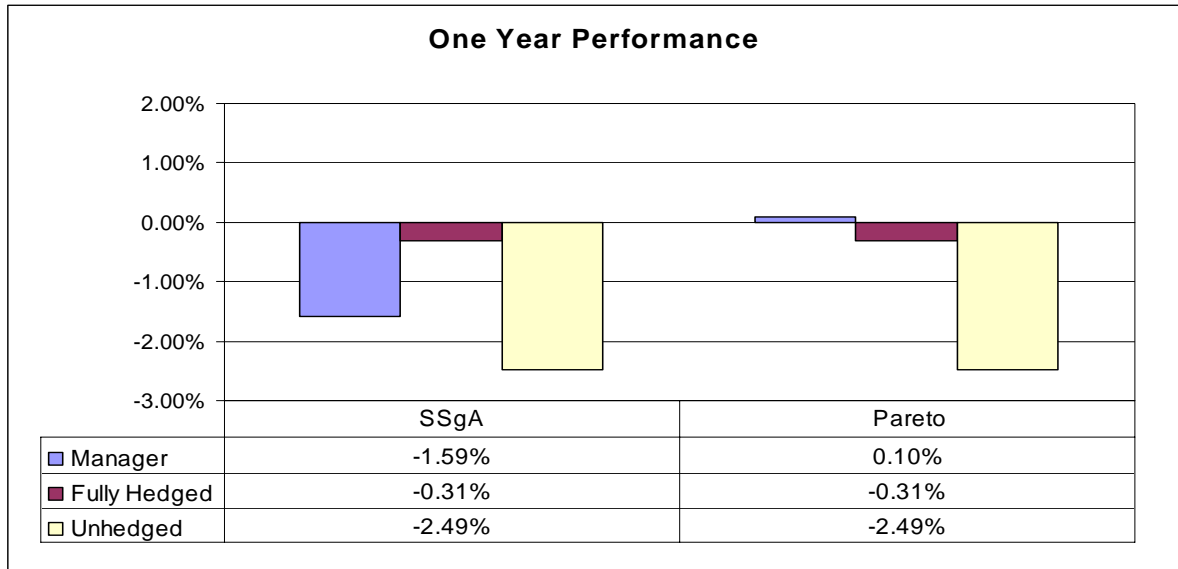


Source: State Street Bank and CalPERS

Comparative Performance of Managers

Graph 4 below summarizes the performance of the currency overlay managers for the one-year period ending September 30, 2008.

Graph 4

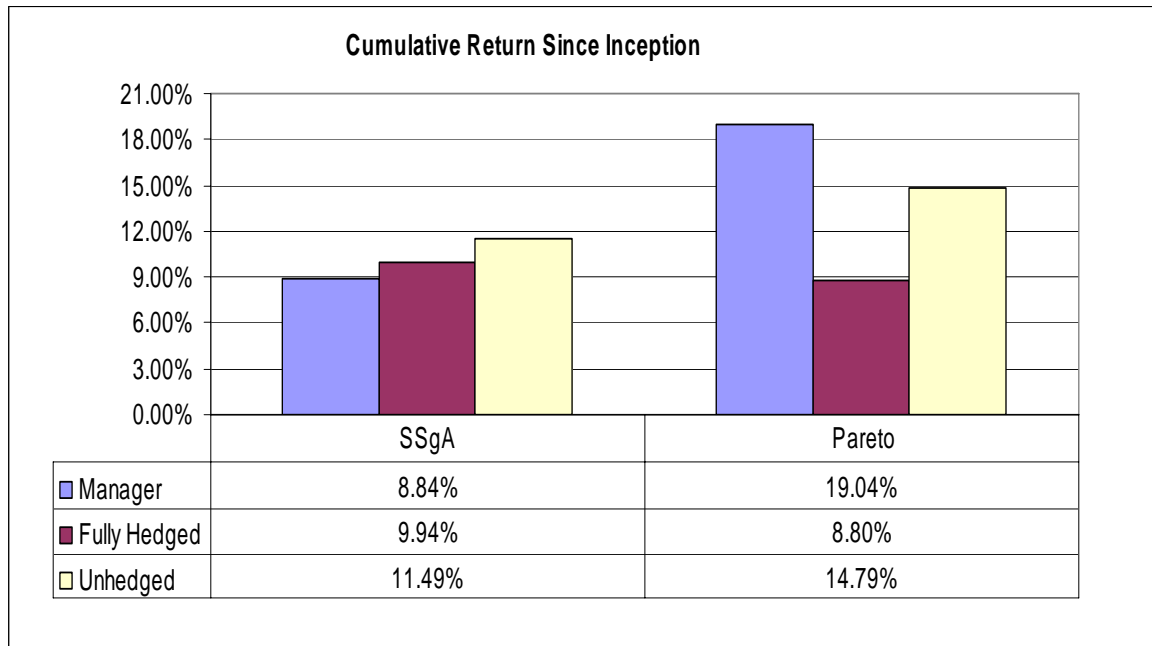


Source: State Street Bank and CalPERS

As seen in Graph 4 above, Pareto managed to outperform both the fully hedged benchmark and the unhedged currency return. SSgA's performance fell within the bounds of hedged and unhedged returns. Given the heightened state of volatility in the currency markets, both managers' returns are acceptable with Pareto having delivered a strong performance.

On the following page, Graph 5 illustrates the performance since inception for each manager.

Graph 5



Source: State Street Bank and CalPERS

Note that each manager has a different portfolio inception date. Specifically, Pareto began managing the portfolio in July 1992, a period of time where alpha generation was possible, namely one of sustained currency strength. Alternatively, SSgA began management in June 1996, which happened to be a sustained period of foreign currency weakness lasting until mid 2001. In this environment the best possible outcome would have been matching the fully hedged benchmark. As a result of their inception date, SSgA's since inception performance has tended to lag the hedged benchmark. Typically, managers will underperform the fully hedged benchmark in periods of foreign currency weakness as they attempt to generate alpha. Examining the results in Table 4 in Attachment 2, it is evident that in times of foreign currency strength, SSgA has generally been able to add value.

V. STRATEGIC PLAN:

Monitoring and review of the External Currency Overlay Program is consistent with Goal VIII: Manage the risk and volatility of assets and liabilities to ensure sufficient funds are available, first, to pay benefits and second, to minimize and stabilize contributions.

VI. RESULTS/COSTS:

The only costs associated with CalPERS' external currency overlay program are the manager fees and staff time to monitor the managers. Returns shown in the agenda item are net of the managers' fees.

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